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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,547	03/29/2004	Zhanjun Gao	86238AMGB	.3436
1333	7590	09/26/2005	EXAMINER	
BETH READ PATENT LEGAL STAFF EASTMAN KODAK COMPANY 343 STATE STREET ROCHESTER, NY 14650-2201			FEGGINS, KRISTAL J	
			ART UNIT	PAPER NUMBER
			2861	

DATE MAILED: 09/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/812,547

Applicant(s)

GAO ET AL.

Examiner

K. Feggins

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-14 is/are allowed.
- 6) ☒ Claim(s) 1-3 and 15 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/29/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 & 15 are rejected under 35 U.S.C. 103(a) as being obvious over Applicant Admitted Prior Art, AAPA (in specification pgs. 10-11) in view of Seiji Mochizuki (JP 60184864A and Gao et al. (US 6,757,003 B1).

The applied reference has a common assignee with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing

that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

AAPA (in the specification) disclose the following claimed limitations:

* regarding claims 1, 3 & 15, a thermal printer and method capable of preventing crease formation in successive dye transfer areas of a dye donor web that can cause line artifacts to be printed on a dye receiver during dye transfer from each dye transfer area to the dye receiver (fig 8, pgs 10-11);

* a thermal print head for heating a dye transfer area of the dye donor web sufficiently to effect dye transfer from the dye transfer area to the dye receiver, but not heating two opposite edge areas of the dye donor web alongside the dye transfer area sufficiently to allow dye transfer from the two edge areas to the dye receiver, so that crease formation can occur at least in respective regions of the dye transfer area adjacent the two edge areas (fig 8, pgs 10-11);

AAPA does not disclose the following claimed limitations:

* regarding claims 1, 3 & 15, a crease-preventing roller for supporting at least the dye transfer area and two edge areas, having an elastic cover layer that can be stretched towards coaxial opposite ends of said roller to spread at least the regions of the dye transfer area in which crease formation can occur in order to oppose crease formation, and having respective movable members moving to stretch said elastic cover layer towards said opposite ends of said roller.

* regarding claim 2, wherein a donor web take-up exerts a pulling force on the dye transfer area and two edge areas at said print head which longitudinally tensions the dye transfer area and two edge areas, and said movable members move to stretch said elastic cover layer towards said opposite ends of said roller in response to longitudinally tensioning the dye transfer area and two edge areas.

* further regarding claim 15, deforming towards coaxial opposite ends of a crease-preventing roller that supports at least the dye transfer area and two edge areas, respective projections on the roller, to stretch an elastic cover layer on the projections towards the opposite ends of the roller, whereby the elastic cover layer spreads at least the regions of the dye transfer area in which crease formation can occur in order to oppose crease formation.

Seiji Mochizuki disclose the following claimed limitations:

* further regarding claims 1, 3 & 15, a crease-preventing roller/5/ for supporting at least the dye transfer area and two edge areas, having an cover layer that can be stretched towards coaxial opposite ends of said roller to spread at least the regions of the dye transfer area in which crease formation can occur in order to oppose crease formation, and having respective movable members/the rise between the symmetrical spiral grooves move as the roller is rotated/ moving to stretch said elastic cover layer towards said opposite ends of said roller (Abstract, fig 2) for the purpose of preventing ink film from being wrinkled.

* regarding claim 2, wherein a donor web take-up exerts a pulling force on the dye transfer area and two edge areas at said print head which longitudinally tensions the dye transfer area and two edge areas, and said movable members move/the rise between the symmetrical spiral grooves move as the roller is rotated/ to stretch said cover layer towards said opposite ends of said roller in response to longitudinally tensioning the dye transfer area and two edge areas (Abstract, figs 1-2) for the purpose of performing stable transfer recording.

* further regarding claim 15, deforming towards coaxial opposite ends of a crease-preventing roller that supports at least the dye transfer area and two edge areas, respective projections on the roller, to stretch an cover layer on the projections/the rise between the symmetrical spiral grooves move as the roller is rotated/ towards the opposite ends of the roller, whereby the cover layer spreads at least the regions of the dye transfer area in which crease formation can occur in order to oppose crease formation for the purpose of tensioning the ink film in the width direction and preventing wrinkles (Abstract, figs 1-2).

Gao et al. disclose the following claimed feature:

* elastic/rubber/ cover layer (col 6, lines 58-65, figs 10 & 12) for the purpose of preventing undesirable line artifact from being printed on a dye receiver.

It would have been obvious at the time of the invention was made to a person having ordinary skill in the art to utilize a crease-preventing roller for supporting at least

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the dye transfer area and two edge areas, having an cover layer that can be stretched towards coaxial opposite ends of said roller to spread at least the regions of the dye transfer area in which crease formation can occur in order to oppose crease formation, and having respective movable members moving to stretch said elastic cover layer towards said opposite ends of said roller; a donor web take-up exerts a pulling force on the dye transfer area and two edge areas at said print head which longitudinally tensions the dye transfer area and two edge areas, and said movable members move/the rise between the symmetrical spiral grooves move as the roller is rotated/ to stretch said cover layer towards said opposite ends of said roller in response to longitudinally tensioning the dye transfer area and two edge areas; deforming towards coaxial opposite ends of a crease-preventing roller that supports at least the dye transfer area and two edge areas, respective projections on the roller, to stretch an cover layer on the projections towards the opposite ends of the roller, whereby the cover layer spreads at least the regions of the dye transfer area in which crease formation can occur in order to oppose crease formation for the purpose of tensioning the ink film in the width direction and preventing wrinkles; and elastic cover layer, as taught by Seiji Mochizuki and Gao et al. into AAPA for the purposes of preventing ink film from being wrinkled, performing stable transfer recording and preventing undesirable line artifact from being printed on a dye receiver.

Allowable Subject Matter

3. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 5-14 are allowed.

The primary reason for indicating allowable subject matter of claim 4 is the inclusion of the limitations of a thermal printer that includes a crease-preventing roller for supporting at least the dye transfer area and two edge areas, having respective projections that can be deformed towards coaxial opposite ends of said roller, and having an elastic cover layer over said projections that is stretched towards said opposite ends of said roller by said projections being deformed towards said opposite ends of said roller, whereby said elastic cover layer spreads at least the regions of the dye transfer area in which crease formation can occur in order to oppose crease formation. It is these limitations found in the claim, as it is claimed in the combination of that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

The primary reason for allowance of claims 5-14 is the inclusion of the limitations of a thermal printer that includes a crease-preventing roller for supporting at least the dye transfer area and two edge areas, having respective projections that are resilient to be deformed towards coaxial opposite ends of said roller when said donor web take-up longitudinal tensions the dye transfer area and two edge areas, and having an elastic cover layer over said projections that is stretched towards said opposite ends of said

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roller by said projections being deformed towards said opposite ends of said roller, whereby said elastic cover layer spreads at least the regions of the dye transfer area in which crease formation can occur in order to oppose crease formation. It is these limitations found in the claim, as it is claimed in the combination of that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

Communication With The USPTO

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to K. Feggins whose telephone number is 571-272-2254. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Talbott Dave can be reached on 571-272-1934. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

K. Feggins 9/06
K. FEGGINS
PRIMARY EXAMINER